POPOV, S. I.

USSR/Mineral Industries Nov 48
Freezing

"Preventing the Freezing Together of Mineral Rock During its Transportation From Strip Mines," S. I. Popov, Magnitogorsk Mining Metal Inst, 2½ pp

"Ugol'" No 11 (272)

Discusses various methods of dealing with problem: desiccation, mechanical isolation, salting, oiling and heating.

[redacted] 14/49T97

POPOV. S.I.

Mbr., Magnitogorsk Mining Metal Inst., -c1948-c49-.

"Preventing the Freezing ,ogether of Mineral Rock during its Transportation from Strip Mines,"Ugol', No. 11, 1948;

"A Slide in the Magnitogorsk Pit," Gor. Zhur., No. 4, 1949.

POPOV, S.I.

The Committee on Stalin [illegible] (of the Council of Ministers USSR [illegible] in the fields of science and inventions announces that the following scientific works [illegible] tific books, and textbooks have been submitted for competition for [illegible] for the years 19[illegible] and [illegible] (Sovetskaya Kul'tura, Moscow, No [illegible])

Name	Title of Work	Nominated by
Zurkov, P.E.	"The Working of Iron Ores by the Open Pit Method"	Magnitogorsk Mining Metallurgical Institute imeni G.I. Nosov
Popov, S.I.		
Golovin, G.M.		
Karpov, A.F.		
Nikol'skiy, N.A.		
Shitov, I.S.		
Bulychev, V.V.		
Ogiyevskiy, V. M.		
Treyvus, M.N.		
Shtremt, A.A.		
Trofimov, G.V.		
Pushkarev, G.I.		
Markman, N.Ye.		
Tikhovidov, I.I.		

Sum. No. [illegible], 7 July 1954

POPOV, S. I.

BULYCHEV, V.V.; GOLOVIN, G.M.; ZURKOV, P.E.; KARPOV, A.F.; NIKOL'SKIY, N.A.; OGIYEVSKIY, V.M.; POPOV, S.I.; TRUYUS, M.N.; SHITOV, I.S.; SHTREMT, A.A.; ZURKOV, P.E., kandidat tekhnicheskikh nauk, redaktor; KOMPANEYETS, V.P., kandidat tekhnicheskikh nauk, retsenzent; VAGANOV, P.V., kandidat tekhnicheskikh nauk, retsenzent; IKONNIKOV, A.N., kandidat tekhnicheskikh nauk, retsenzent; SAUKHAT, I.G., kandidat tekhnicheskikh nauk, retsenzent; NIKOLAYEV, S.I., retsenzent.

[Mining iron ore by the opencast method] Razrabotka zheleznykh rud otkrytym sposobom. Pod. obshchei red. P.E.Zurkova. Sverdlovsk, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1953. 632 p. (MLRA 7:8)
(Iron mines and mining)

1. POPOV, S. I.

2. USSR (600)

4. Strip Mining

7. Review of P. YE. Zurkov's book "Terrace operations in strip mines." S. L. Popov, Ugol', 28, No. 1, 1953

9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

L 08035-67 EWT(m)/EWP(j) RM

ACC NR: AP7001654 SOURCE CODE: UR/0409/66/000/002/0254/0258

FOFOV, S. I., KURDYUMOVA, T. N., DOKUNIKHIN, N. S., Scientific Research Institute of Organic Intermediates and Dyes, Moscow (Nauchno-issledovatel'skiy institut organicheskikh polupoduktov i krasiteley)

29

B

"Studies of Anthrapyridone. I. Interaction Between Anthrapyridone Derivatives and Phosphorus Pentachloride"

Riga. Khimiya Geterotsiklichoskikh Soyedineniy (Chemistry of Heterocyclic Compounds), No 2, 1966, pp 254-258

Abstract: It was established that, the reaction between phosphorus pentachloride and N-methylanthrapyridone commences not only at 180°C but also at lower temperatures; in chlorobenzene at 130°C a crystalline substance which analysis found to correspond to the product of the association of a molecule of phosphorus pentachloride to a molecule of N-methylanthrapyridone, could be isolated; this substance was structurally identified as 2-tetrachlorophosphyoxy-3-methyl-7-oxo-7N-dibenz[f, ij] isoquinolinium chloride and it readily reacts with primary amines, forming the corresponding 2-imines of N-methylanthrapyridone. By contrast, at 180°C the reaction between phosphorus pentachloride and N-methylanthrapyridone results in the formation of 2-chloroanthrapyridine. [JPRS: 36,455]

TOPIC TAGS: phosphorus chloride, heterocyclic base compound, amine
SUB CODE: 07 / SUBM DATE: 10Nov64 / ORIG REF: 003 / OTH REF: 006

UDC: 547.837.6+542.944.4/542.958.3

Card 1/1 mc

0924 1417

FISENKO, Georgiy Lavrent'yevich; POPOV, S.I., prof., retsenzen

[Stability of walls of open-pit mines and dump piles] Ustoichivost' bortov kar'erov i otvalov. 2. izd., perer. i dop. Moskva, Nedra, 1965. 377 p. (MIRA 18:7)

POPOV, S.I.

Selective separation of copper and zinc minerals by return flotation. TSvet. met. 38 no.2:92-93 F '65. (MIRA 18:3)

POPOV, S.I., doktor tekhn.nauk; POSOKHOV, Yu.N., kand.tekhn.nauk; KARPOV, A.P., gornyy inzh.

Basic problems concerning open pit mining of thick steeply pitchine deposits. Gor.zhur. no.12:9-13 D '64.
(MIRA 18:1)

1. Magnitogorskiy gornometallurgicheskiy institut (for Posokhov).
2. Uchalinskiy rudnik (for Karpov).

MEL'NIKOV, N.V.; SLEDZYUK, P.Ye.; ZAV'YALOV, S.S.; BUNIN, A.I.; VASIL'YEV, M.V.; NOVOZHILOV, M.G.; ZURKOV, P.E.; IL'IN, M.V.; VILESOV, G.I.; POPOV, S.I.; SANDRIGAYLO, N.F.; SHILIN, A.N.; ZUBRILOV, L.Ye.; TSIMBALENKO, L.N.; VLOKH, N.P.; OMEL'CHENKO, A.N.

Mikhail Lazarevich Rudakov, 1912-1964; an obituary. Gor. zhur. no.9:78 S '64. (MIRA 17:12)

PANYUKOV, P.N., doktor geol.-mineral. nauk, prof.; POPOV, S.I., doktor tekhn. nauk, prof.

Readers' response to the article "Constructing the expected surface of sliding according to stresses in open pit sides". Ugol' 39 no.10: 50-51 O '64. (MIRA 17:12)

1. Moskovskiy institut radioelektroniki i gornoy elektromekhaniki (for Panyukov). 2. Magnitogorskiy gornometallurgicheskiy institut (for Popov).

POPOV, S.I., inzh.

Regulated drive with a collector type a.c. motor-amplifier.
Trudy MEI no.38:97-110 '62. (MIRA 17:2)

KULIKOV, L.D.; POPOV, S.I.; KHOMULLO, N.K.

Technology of treating impregnated sulfide ores from the Levikha and Lomovo deposits. TSvet. met. 36 no.12:72-73 D '63. (MIRA 17:2)

MELEKHOVA, Ye.L.; KULIKOV, L.D.; POPOV, S.I.; KHOMULLO, N.K.

Comparative testing of "Mekhanobr" and "Sikhali" flotation machines at the Kirovgrad plant. TSvet. met. 36 no.9:14-16 S '63. (MIRA 16:10)

POPOV, S.I., inzh.; FEDOROV, S.P., inzh.

Experience in the construction and installation of closed water disposal conduits from standardized precast reinforced concrete elements in the "Lithuanian State Regional Electric Power Plant." Energ. stroi. no.31:12-17 '62. (MIRA 16:7)

1. Rizhskoye otdeleniye Vsesoyuznogo gosudarstvennogo proyektnogo instituta stroitel'stva elektrostantsiy.
(Precast concrete construction)
(Lithuania--Electric power plants)

KULIKOV, L.D.; BOLKOV, D.A.; POPOV, S.I.; KHOMULLO, N.K.

Selecting a flow sheet for the dressing of Gay deposit ores.
TSvet. met. 36 no.6:1-2 Je '63. (MIRA 16:7)

(Gay Region—Nonferrous metals)
(Ore dressing)

POPOV, S.I., KURDYUMOVA, T.N.

Reduction hydrolysis of 6-arylaminoanthrapyridones. Zhur.ob.khim. 32 no.9:3022-3025 S '62. (MIRA 15:9)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley.
(Dibenzisoquinolinedione) (Hydrolysis)

VASIL'YEV, M.V., gornyy inzh.; KOTOV, V.N., gornyy inzh.; RUSSKIY, I.I., gornyy inzh.; KHOKHRYAKOV, V.S., gornyy inzh.; POPOV, S.I., gornyy inzh.; SHILIN, A.N., gornyy inzh.; TARAN, M.I., gornyy inzh.; SHKUTA, E.I., gornyy inzh.

"Strip mining" by M.G.Novozhilov. Reviewed by M.V.Vasil'ev and others. Gor. zhur. no.7:79-80 Jl '61. (MIRA 15:2)
(Strip mining)
(Novozhilov, M.G.)

POPOV, S.I., inzh.

Organization of the subsurface intake of water for operation of the Lithuanian State Regional Electric Power Station. Energ. stroi. no.27:15-20 '62. (MIRA 15:9)

1. Rizhskoye otdeleniye Vsesoyuznogo gosudarstvennogo proyektnogo instituta "Teploelektroproyekt".
(Lithuania--Electric power plants--Water supply)

POPOV, S.I., gornyy inzh.; DUDUSHKINA, K.I., inzh.-geolog.

Effect of time on the stability of the benches and sides of open-pit mines. Gor.zhur. no.4:38-40 Ap '62. (MIRA 15:4)
(Strip mining) (Weathering)

POPOV, S.I., dotsent; KOTOV, V.N.

"Strip mine dumps" by P.E.Zhurkov and G.V.Trofimov. Reviewed by S.I.Popov and others. Gor. zhur. no.7:80 Jl '61. (MIRA 15:2)

1. Magnitogorskiy gorno-metallurgicheskiy institut (for Popov). 2. Nachal'nik Gornogo upravleniya Magnitogorskogo metallurgicheskogo kombinata (for Kotov)
(Strip mining)
(Zurkov, P.E.)
Trofimov, G.V.)

DUDUSHKINA, K.I., inzh.; POPOV, S.I., inzh.

Stability of open-pit sides. Bezop.truda v prom. 6 no.2:14-16 F '62. (MIRA 15:2)

(Mining engineering)

KULIKOV, L.D.; POPOV, S.I.

Increasing the wear resistance of sand pump parts by rubber coating. Obog. rud 4 no.5:34 '59. (MIRA 14:8)

1. Kirovogradskiy medeplavil'nyy kombinat.
(Mechanical wear) (Rubber coatings)

NIKOLENKO, L.N.; POPOV, S.I.

Aromatic compounds with a long side chain. Part 8: Reactions of alkyl-(4-chlorophenyl) ketones with phosphorus pentachloride. (MIRA 15:2)
Zhur. ob. khim. 32 no.1:29-32 Ja '62.

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I. Mendeleyeva.
(Ketones) (Phosphorus chloride)

KULESHOV, Nikolay Andreyevich; NOVOZHILOV, M.G., prof., doktor tekhn.nauk, red.; ZURKOV, P.E., prof., doktor tekhn.nauk, red.; POPOV, S.I., dotsent, kand.tekhn.nauk, red.; DIDKOVSKIY, D.Z., inzh., otv.red.; KAUFMAN, A.M., red.izd-va; IL'INSKAYA, G.M., tekhn.red.

[Open-pit mining] Otkrytye gornye raboty. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1961. 327 p. (MIRA 14:6)

(Strip mining)

S/064/60/000/004/012/021/XX
B013/B063

AUTHORS: Popov, S. I., Shashkov, V. I., Bulatov, V. D. (Deceased)

TITLE: Use of the Flotation Process in the Extraction of Selenium From Selenium-poor Slimes Formed in the Production of Sulfuric Acid

PERIODICAL: Khimicheskaya promyshlennost', 1960, No. 4, pp. 38-41

TEXT: The authors have examined the possibility of using the flotation process in extracting selenium from selenium-poor slimes formed in the production of sulfuric acid. A study of the distribution of selenium in the products of the contact system has shown that up to 42% of the initial selenium content of the raw material is concentrated in selenium-poor slimes from the washing department (promyvnoye otdeleniye). There is a considerable loss of selenium in solid residues (ashes, dust), which amounts to more than 21%. The authors have worked out a scheme for the extraction of selenium from slimes with a selenium content of 0.5 - 4.0%, making use of the flotability of selenium with petroleum,

Card 1/3

Use of the Flotation Process in the Extraction of Selenium From Selenium-poor Slimes Formed in the Production of Sulfuric Acid

S/064/60/000/004/012/021/XX
B013/B063

alcohol, etc. (Refs. 4,5). Slimes from refrigerators of the washing department have been studied. The selenium content varied from 0.6 to 2%. The authors found that selenium is concentrated chiefly in fine fractions. The presence of highly disperse selenium particles (less than 5μ) and the pulp components containing them complicate the flotation process. The slime particles were enlarged by heating the pulp. Preliminary studies have shown that the extraction of selenium can be increased and the quality of the selenium concentrate improved by heating the pulp to 90-100°C. It is noted that the density of the pulp hardly increases the extraction of selenium but deteriorates the quality of the concentrate. A pulp density of 23 - 25% is described as being an optimum. Flotation was found to be intensified by an increase in the acidity of the pulp. The concentration of sulfuric acid in the pulp must not be lower than 20%. Petroleum, butyl xanthate, tall oil, oleic acid (collectors), and various flotation oils (foamers) were tested for the purpose of studying the effect of collectors and foamers. Tests made according to a

Card 2/3

Use of the Flotation Process in the Extraction of Selenium From Selenium-poor Slimes Formed in the Production of Sulfuric Acid

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B013/B063

continuous flotation scheme have shown that no reagents are required for selenium flotation in electrolytes. The quality of the selenium concentrate can be improved by double purification. The final results indicate that extraction of selenium without reagents is more effective than extraction with reagents. The first fractions of the selenium concentrate have a higher selenium concentration than the following fractions. Flotation is most effective during the first 6-10 min. The flotation plant developed according to the experiments described here has recently been put in operation, and the results obtained confirm the results of laboratory tests. There are 5 figures, 4 tables, and 5 Soviet references.

Card 3/3

POPOV, S.I.; SHASHKOV, V.I.; BULATOV, V.D. [deceased]

Flotation recovery of selenium from poor slurries produced in the manufacture of sulfuric acid. Khim.prom. no.4:302-305 Je '60. (MIRA 13:8)
(Selenium)

POPOV, S. I., Dr. Tech Sci — (diss) "Stability of the Edges of Open Mining Pits," Moscow, 1960, 46 pp, 200 copies (Moscow Mining Institute im I. V. Stalin) (KL, 49/60, 126)

SIROTIN, A.A., kand. tekhn. nauk, dotsent; YELISEYEV, V.A., inzh.; POPOV, S.I., inzh.

New electric drive for internal grinding machines. Trudy MEI no.30:239-252 '58. (MIRA 12:5)

1.Moskovskiy ordena Lenina energeticheskiy institut, Kafedra elektrooborudovaniya promyshlennykh predpriyatiy.
(Grinding machines--Electric driving)

POPOV, S.I.; KULIKOV, L.D.

Results obtained in reducing the consumption of reagents at the Kirovgrad Ore Dressing Plant. TSvet. met. 31 no.11:1-8 N '58. (MIRA 11:12)

1.Kirovgradskiy medeplavil'nyy kombinat.
(Kirovgrad--Ore dressing)
(Chemical tests and reagents)

SOV/136-9-11 1/2

AUTHORS: Popov, S.I.
Kulikov, L.D.

TITLE: Results of Reducing Reagent Consumption at the Kirovgrad Beneficiation Works (Rezul'taty snizheniya rashoda reagentov na Kirovgradskoy obogatitel'noy fabrike)

PERIODICAL: Tsvetnyye Metally, 1958, Nr 11, pp 1-8 (USSR)

ABSTRACT: At the Kirovgrad Beneficiation Works reagents account for 21% of the total ore-treatment costs. The authors note that many articles on the reduction of reagent consumptions have been published recently and that an All-Union conference has been convened by the Tsentral'noye pravleniye NTO tsvetnoy-metallurgii (Central Board of the NTO for non-ferrous metallurgy) on this subject. With the object of fulfilling the resolutions of the All-Union conference on reagent economy held at the end of 1957, the following at the Kirovgrad Works started experiments in this direction: L.D.Kulikov, V.M.Gerasov, M.D.Anisimov, N.K.Khomulla, A.T.Galust'yan and R.I.Zelenina (from the works) and S.I.Popov, D.A.Bolkov and V.V.Moroz (of the research

Card 1/3

Results of Reducing Reagent Consumption at the Kirovgrad Beneficiation Works

group). The authors describe the results obtained. Two types of ore are treated at the works: an ingrained copper-zinc-pyrite (12-24%S) and a uniform sulphide (44-46% S) covering the composition range (table 1) 0.84-1.70% Cu, 0.50-5.62% Zn. The first type are treated by a collective-selective flotation flowsheet (fig.1) with two stage crushing; the second by simple copper flotation after grinding to 90-92% - 0.074 mm. Laboratory experiments on the effectiveness of various collectors on the flotation of Kirovgrad sulphides were carried out with butyl and ethyl xanthates and mixtures of them. In February 1958 production tests with the two collectors for the flotation of copper, zinc and iron minerals showed that the optimal conditions were different for different minerals. In the second stage, laboratory tests on xanthate consumptions in the recovery of copper (fig.2) zinc (fig.3) and sulphide were followed by the adoption

SOV/136-59-11-1/21

Results of Reducing Reagent Consumption at the Kirovgrad Beneficiation Works

of a new practice in March 1958. This has reduced butyl-xanthate and flotation-oil consumptions by 52-80 and 59.50% respectively. The authors show that reductions in collector and foaming-agent consumptions led to savings in other reagents and gave better concentrates. There are 4 figures and 8 tables.

ASSOCIATION: Kirovgradskiy medeplavil'nyy kombinat (Kirovgrad Copper-smelting Combine)

Card 3/3

15-57-3-3960

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 3, p 206 (USSR)

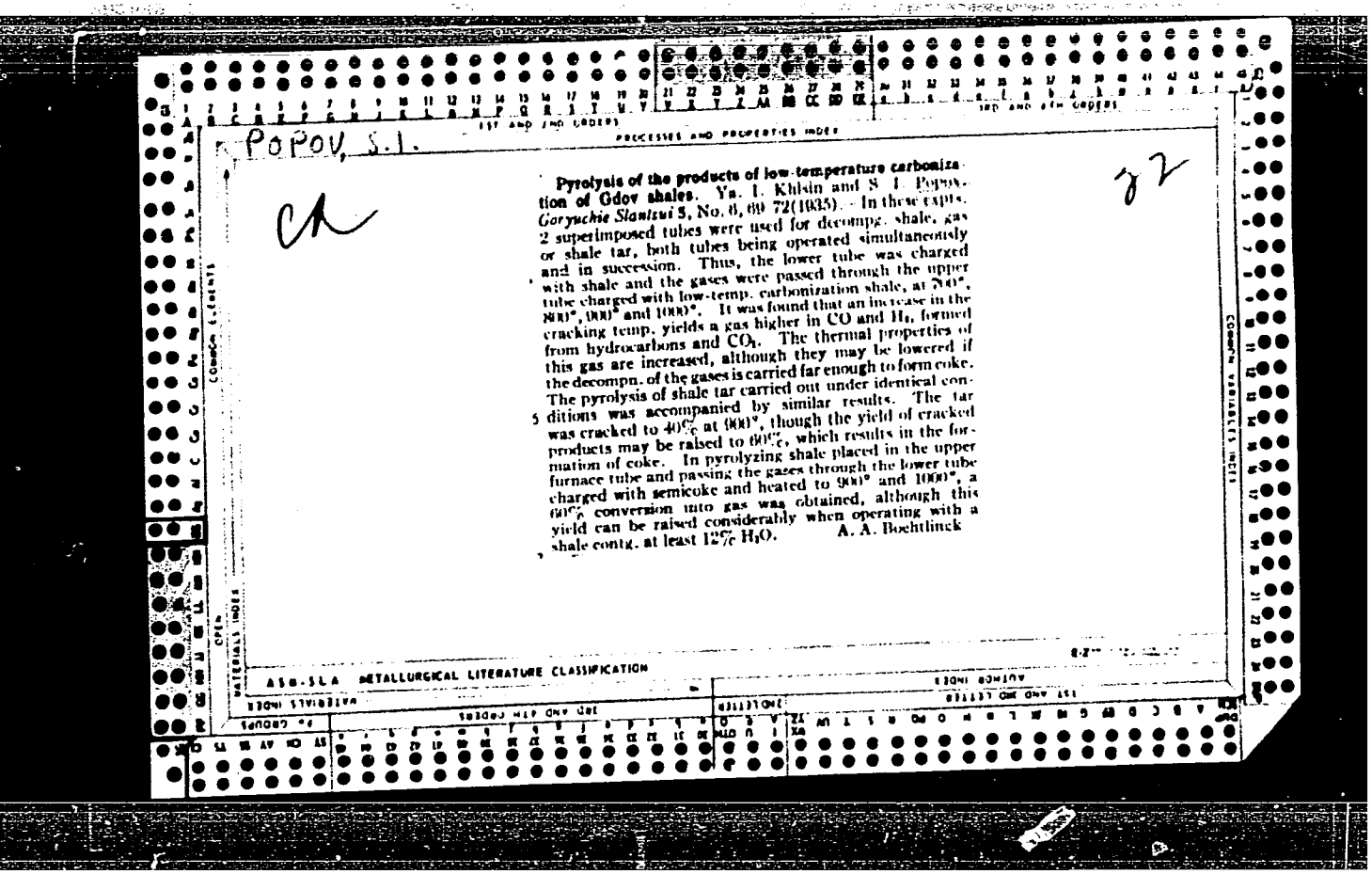
AUTHOR: Popov, S. I.

TITLE: A Nomogram for Constructing a Profile of the Border of an Open-Pit Mine in a Complex Geological Environment (Nomogramma dlya postroyeniya profilya borta kar'yera v slozhnykh geologicheskikh usloviyakh)

PERIODICAL: Sb. nauch. tr. Magnitogor. gorno-metallurg. in-ta, 1955, Nr 9, pp 89-98

ABSTRACT: Bibliographic entry

Card 1/1



POPOV, S. I.

Pyrolysis of the products of low-temperature carbonization of Gdov shales. Ya. I. Khisin and S. I. Popov. *Goryuchie Slantsi* 5, No. 6, 69–72(1935).—In these exps. 2 superimposed tubes were used for decompg. shale, gas or shale tar, both tubes being operated simultaneously and in succession. Thus, the lower tube was charged with shale and the gases were passed through the upper tube charged with low-temp. carbonization shale, at 700°, 800°, 900° and 1000°. It was found that an increase in the cracking temp. yields a gas higher in CO and H_2, formed from hydrocarbons and CO_2. The thermal properties of this gas are increased, although they may be lowered if the decompn. of the gases is carried far enough to form coke. The pyrolysis of shale tar carried out under identical conditions was accompanied by similar results. The tar was cracked to 40% at 900°, though the yield of cracked products may be raised to 60%, which results in the formation of coke. In pyrolyzing shale placed in the upper furnace tube and passing the gases through the lower tube charged with semicoke and heated to 900° and 1000°, a 60% conversion into gas was obtained, although this yield can be raised considerably when operating with a shale contg. at least 12% H_2O. A. A. Boehtlinck

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

POPOV, S. I., gornyy inzh.

Avantageous limits in using some systems of haring without transportation. Ugol' 34 no.7:19-21 Jl '59. (MIRA 12:10)
(Strip mining)

VISHNYAKOV, V.F., POPOV, S.I.; NIKOLAYEV, P.P.; NIKITIN, B.G., veter, vrach.; GRUZDEVA, Ye.K., veter. vrach; SMIRNOV, A.M., prof.

Preparation and application of the gastric juice of horses. Veterinariia 40 no.5:44-47 My '63. (MIRA 17:1)

1. Direktor Gosudarstvennogo plemennogo zavoda "Lesnoye", Leningradskoy oblasti (for Vishnyakov). 2. Glavnyy veterinarnyy vrach Gosudarstvennogo plemennogo zavoda "Lesnoye" Leningradskoy oblasti (for Popov). 3. Nachal'nik tsekha po proizvodstvu natural'nogo zheludochnogo soka loshadey Gosudarstvennogo plemennogo zavoda "Lesnoye" Leningradskoy oblasti (for Nikolayev). 4. Gosudarstvennyy plemennoy zavod "Lesnoye" Leningradskoy oblasti (for Nikitin, Gruzdeva). 4. Leningradskiy veterinarnyy institut (for Smirnov).

S/058/62/000/010/061/093
A061/A101

17.9500

AUTHOR: Popov, S. K.

TITLE: Growth and some uses of valuable corundum crystals

PERIODICAL: Referativnyy zhurnal, Fizika, no. 10, 1962, 13, abstract 10E99 (In collection: "Rost kristallov. T. 2.", Moscow, AN SSSR, 1959, 140 - 210)

TEXT: A technique for growing corundum single crystals in bulbs and rods is described together with an improved, partly automated industrial apparatus. Complex problems, having to do with the very precise charge supply and a high uniformity in heating the growing crystals, are solved in connection with the crystallization of fine rods. Methods are worked out for the diamondless corundum polishing (by the flame process), and for the rod bending. An apparatus has been devised for the routine dispatching of these operations. A new use has been found for corundum rods to serve as thread guides in the synthetic fiber industry.

[Abstracter's note: Complete translation]

Card 1/1

POPOV, S.K.

Growing of corundum gem crystals and some of their uses. Rost krist. 2:140-210 '59. (MIRA 13:8)

(Corundum)

(Popov, Savva Kirillovich, 1900-1953)

AVER'YANOV, Aleksandr Dmitriyevich; GLOTOV, Yuriy Georgiyevich; POPOV, Serafim Konstantinovich; PERVOV, V.M., red.; MARCHUKOVA, M.G., red.izd-va; LAVRENOVA, N.B., tekhn.red.

[Use of Gants-Endrashek VIII 1hR 216/310 engines by the Estonian merchant marine] Opyt ekspluatatsii dvigatelei Gants-Endrashek VIII IhR 216/310 v Estonskom parokhodstve. Moskva, Izd-vo "Morskoi transport," 1959. 43 p. (MIRA 12:12)
(Estonia--Merchant marine)
(Marine diesel engines)

POPOV, Sl., inzh.

Radioisotopes in the use of cutting instruments. Priroda Bulg 10 no.6:31-27 '61.

L 08611-67 EWP(c)/EWP(k)/EWP(h)/EWP(l)/EWP(v)/EWP(t)/ETI IJP(c) RM/JD

ACC NR: AP6011868 SOURCE CODE: BU/0005/65/000/011/0501/0503

AUTHOR: Popov, Slavcho (Engineer); Boev, Dobrin (Engineer); Avramov, Dimitur (Engineer)

47
45

ORG: none

TITLE: Research on protective lead blocks produced at the Medical Instruments and Equipment Plant in Sofia

SOURCE: Mashinostroene, no. 11, 1965, 501-503

TOPIC TAGS: lead, nuclear protective equipment, radiation protection, nonmilitary nuclear application, medical equipment

ABSTRACT: The properties of protective lead blocks produced at the Medical Instruments and Equipment Plant (Mediko-instrumentalniya i aparaturen zavod) in Sofia were studied for the purpose of improving the manufacturing technology of the blocks for series production. The measurement were made in accordance with standards developed by the Council for Mutual Economic Assistance in the Utilization of Atomic Energy for Peaceful Purposes (SIV). The measurement results show that 1) the specific gravity of the lead blocks is 10.8 g/cm^3 within an accuracy of $\pm$ 0.9% and satisfies the standard requirements, 2) the Brinell hardness varies from 10.5 to 11.5 kg/mm^2, and 3) the deviation from homogeneity is smaller than the permissible deviation of

Card 1/2 UDC: 614.898

L 08641-67

ACC NR:AP6011868 2

10%. The flaw detector used in the investigation was designed by Sl. Ormandzhiev, an engineer, of the Physics Department. It is noted that the SIV standards are incomplete and that it is desirable to develop them further in order to improve the quality of the lead blocks which are being exported to the member countries of SIV. Orig. art. has: 5 figures and 1 table.

SUB CODE: 18,06,07/ SUBM DATE: none/ SOV REF: 004

Card 2/2 nr

B/005/62/000/009/001/001
D267/D307

AUTHORS: Slivkov, K., Popov, S.L. and Sedloev, I., Engineers

TITLE: A new method of metallographic investigation of metallic coatings

PERIODICAL: Mashinostroyene, no. 9, 1962, 28-32

TEXT: To do away with some disadvantages of the skew-microsection method of investigating metallic coatings, the NIIM developed a new method, called the method of micro-sections, along spherical section. The base metal (e.g. sheet iron with maximum thickness of 1 mm) is first shaped spherically by die-stamping and the metallic coating is applied: the radius of curvature is determined with a spherometer or another indicator: in some cases the specimen is provided with another metallic coating characterized by a higher resistance to wear (to prevent the rounding-off of edges): the specimen is then embedded in a synthetic resin (epoxide resin 1200 with 6% of ethylenediamine as hardener), and is finally subjected to grinding and polishing. After suitable etching it is

Card 1/2

POPOV, S. M.

Popov, S. M. - "On the new impulse hook-up in magnetic television scanning," Trudy Studench. nauch.-tekhn. o-va (Mosk. energet. in-t im. Molotova), Issue 2, 1942, 1943, p. 20-23

SO: U-4355, 14 August 53, (Letopis 'Zhurnal 'nykh Statey, No. 15, 1949)

POPOV, S.M.

Water and gas content of carburan. Trudy Radiev. inst. AN SSSR 5 no.2:256-286 '57. (MLRA 10:8)
(Uranium ores)

Popov, S.M.

133-10-22/26

AUTHOR: Ioffe, M. M. and Popov, S. M. Engineers.

TITLE: An Increase of Productivity of Vacuum Furnaces for Annealing of the Transformer Steel. (Povysheniye Proizvoditel'nosti Vakuumnykh Pechey Dlya Otzhiga Transformatornoy Stali).

PERIODICAL: Stal', 1957, No. 10, p. 948.

ABSTRACT: Modification of vacuo-annealing practice on the Zaporozhstal' Works is described. With normal practice the total duration of annealing treatment for transformer steel was 130-140 hours, consisting of heating to soaking temperature 24-25 hours, soaking 24 hours and cooling to 600°C under vacuo - 80-90 hours. The cooling procedure was modified as follows: cooling to 950°C under vacuo, breaking vacuo with nX gas (10% CO_2, 12% CO, 6% H_2, the rest nitrogen), replacing of the hot bell by a cool one (about 200°C, in individual cases 400-500°C) and the formation of secondary vacuo and cooling to 600°C. In this way the duration of cooling was reduced from 85 hours to 47-50 hours. Moreover, utilising the heat of the bell for the heating of the next charge shortens the heating time by about 5 hours and gives a power economy of 148 kW h/ton. The metal obtained with the new practice had similar electromagnetic properties as that annealed

Card 1/2

SOV/94-58-8-8/22

AUTHORS: Tarasevich, N. I., Ioffe, M. M., Popov, S.M., Veklich, M. I., Drausal', A. V., Dikovskiy, A.M., Merkulov, V. G, and Arno, B. E.

TITLE: Increasing the Output of Hood-type Electric Furnaces with Economy of Electric Power (Ekonomiya elektroenergii i uvelicheniye proizvoditel'nosti kolpakovykh elektropechey)

PERIODICAL: Promyshlennaya Energetika, 1958, 13 No 8, pp 20-21 (USSR)

ABSTRACT: This suggestion was awarded third prize in an All-Union Power Economy Competition. In the manufacture of transformer steel high temperature annealing is carried out under vacuum at a temperature of 1180°C. This operation is carried out in special vacuum hood-type electric furnaces. The sheet steel in the furnace is protected by muffles which in their turn are covered by the hood which contains electric heaters and water-cooled vacuum seal. The annealing period includes a cooling time which reduces the output of the furnace and increases the power output because the heat in the hood is wasted. The furnaces were reconstructed in such a way that when the heating period is over the hot hood is quickly

Card 1/2

Popov, S. M.

Popov, S. M. On the cylindrical buckling of plates beyond the elastic limit. Akad. Nauk SSSR. Prikl. Mat. Meh. 14, 543–552 (1950). (Russian) No. 5

The paper presents an exact formulation of the cylindrical buckling of a long, thin, rectangular plate under uniform compression. A. A. Ilyushin has determined approximate lower and upper bounds of the relative thickness of the plastic layer in the middle of the plate and concluded that the unloading buckling load will differ little from the value obtained from the approximate solution. The present paper shows, that although Ilyushin's conclusions were not justified on this basis, the approximate solution does indeed yield a good approximation to the critical load. The author also determines the boundary between the plastic and the elastic-plastic zones of the plate, as well as the relative thickness of the plastic zone in the middle of the plate.

H. I. Ansoff (Santa Monica, Calif.).

glm

Inst, Mechanics, Acad. Sci. USSR

Source: Mathematical Reviews, Vol 13 No1

POPOV, S M

Popov, S. M. On the extension of the method of relaxation of boundary conditions to the stability of a rectangular plate beyond the elastic limit. Akad. Nauk SSSR. Prikl. Mat. Meh. 15, 103–106 (1951). (Russian)

A method of weakened boundary conditions is used to obtain an approximation to the critical value of rigidity of a thin plate subjected to uniaxial compression. The present application of the method essentially involves substituting for the requirement that the slope at the built-in edges be zero everywhere, a requirement that a weighted average of the slope be zero. It is stated that this method has yielded very good approximations to the exact solution in a number of computed cases. *H. I. Ansoff* (Santa Monica, Calif.).

Source: Mathematical Reviews, Vol 13 No. 8

Popov, S. M.

Popov, S. M. Stability of simply supported plates beyond the elastic limit. Inžen. Sb. 9, 65–98 (1951). (Russian)

Based on the theory of small elasto-plastic deformations, the author establishes the stability equation for rectangular plates and the corresponding energy expression. Special cases studied by energy methods comprise uniaxial and biaxial compression. The case of uniaxial compression of plates with simply supported edges at right angles to the applied load and various edge conditions along the other two sides is studied by use of the equilibrium equations. Extensive numerical results are given in the form of tables and curves.

J. R. M. Radok (Providence, R.I.).

T - F/W

Popov, S.M.

Popov, S. M. Stability beyond the elastic limit of plates with reinforcing ribs. Inžen. Sb. 12, 49-76 (1952). (Russian)

The author investigates the stability of simply supported, rectangular plates with longitudinal or transverse reinforcing ribs in uniaxial compression or under uniform shear loading, when the common material becomes plastic. Using an energy approach, he obtains an infinite system of linear equations for the Fourier coefficients of the displacement solution which he solves approximately. Results for particular cases involving one to three reinforcements are tabulated. One additional problem considered is that of a plate, simply supported along two sides and reinforced along the other two sides, under uniaxial compression.

J. R. M. Radok.

1 - F/W

USSR · 1-F/W

Popov, S. M. Stability beyond the elastic limit of rectangular plates with off-center tension or compression. Inzen. Sb. 18, 165–173 (1954). (Russian)

The problem of the title ... for simply-supported plates, numerical results bein... special cases. The analysis is similar ... reviewed above, and the reviewer's r... latter paper again apply. *H. G... Halstead*

Popov S.M.

PHASE I BOOK EXPLOITATION SOV/4000

SOV/12-M-27

Akademiya nauk SSSR. Institut mekhaniki

Inzhenernyy sbornik, t. 27 (Engineering Collection, Vol. 27) Moscow, Izd-vo AN SSSR, 1960. 210 p. 2,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye tekhnicheskikh nauk.

Resp. Ed.: A. A. Il'yushin; Ed.: V. M. Akhundov; Ed. of Publishing House: V.M. Akhundov; Tech. Ed.: A.P. Guseva.

PURPOSE: This book is intended for engineers, applied physicists, and applied mathematicians.

COVERAGE: The book consists of 24 articles on such problems as wing theory, supersonic flow, theory of shells, stability, plasticity and elasticity, the bending of thin plates and shells, and various aspects of applied mathematics. No personalities are mentioned. References accompany most of the articles.

AVAILABLE: Library of Congress

ACC NR: AT6035085 (N) SOURCE CODE: UR/3095/66/035/000/0031/0041

AUTHORS: Postnova, I. D.; Popov, S. M. (deceased)

ORG: none

TITLE: Fluctuations of heat balance in the tropical zone of the Atlantic Ocean (from data of the 12th voyage of the Russian research ship Mikhail Lomonosov)

SOURCE: AN UkrSSR. Morskoy gidrofizicheskiy institut. Trudy, v. 35, 1966. Gidrofizicheskiye i gidrokhimicheskiye issledovaniya tropicheskoy zony Atlantiki (Hydrophysical and hydrochemical research in the tropical zone of the Atlantic), 31-41

TOPIC TAGS: heat balance, solar radiation, evaporation, research ship, oceanography

ABSTRACT: This paper is a reconnaissance survey of the heat balance observed along the route of the Russian research ship Mikhail Lomonosov during its 12th voyage from 15 October to 26 December 1962. The area of study lies between 55° N. Lat. and 22° S. Lat. and between 5° E. Long. and 41° W. Long. Data are also compared with earlier voyages of the same ship. The elements considered are expressed in the formula for heat balance employed by the authors

$$B = q - \Delta q - q_s - q_e \pm q_c,$$

where q is the amount of heat falling each second on a square meter of ocean surface

Card 1/2

ACC NR: AT6035085

as a result of direct and scattered solar radiation, Δq is the amount of heat lost per second from each square meter of ocean surface through reflection of incident solar radiation, q_r is the amount of heat lost each second per square meter through long-wave radiation, q_e is heat loss through evaporation, and q_c is heat loss through contact heat exchange with the surface layer of air. Analysis of daily fluctuations in heat balance of the ocean and consideration of the various components show that two components are fundamental in changing the heat balance of the Atlantic in the tropical belt--the total radiation reaching the ocean surface from the sun and the loss of heat by evaporation at the ocean surface. The amount of radiation loss in this region ranges between rather narrow limits because of the thick layer of water vapor above the ocean. The authors plan to use the data from the 12th voyage in combination with a compilation of data from the other voyages to arrive at a clearer picture of details in changes of heat balance over the Atlantic. Orig. art. has: 4 figures, 1 table, and 5 formulas.

SUB CODE: 08,03/ SUBM DATE: none/ ORIG REF: 006

Card 2/2

L 31145-66 EWT(1)/FCC GW

ACC NR: AP5007593 SOURCE CODE: UR/0362/65/001/001/0018/0026

AUTHOR: Popov, S. M. (Deceased)

ORG: Institute of the Physics of the Atmosphere, AN SSSR (Institut fiziki atmosfery AN SSSR)

TITLE: Some statistical characteristics of the vertical structure of temperature and humidity fields

SOURCE: AN SSSR. Izvestiya. Fizika atmosfery i okeana, v. 1, no. 1, 1965, 18-26

TOPIC TAGS: autocorrelation function, atmospheric sounding, atmospheric humidity, atmospheric temperature

ABSTRACT: Some statistical characteristics (autocorrelation and cross-correlation functions) of the vertical structure of temperature and humidity fields were obtained. The initial data were obtained from aerological soundings conducted at American weather stations at Bismarck (North Dakota) and ship "C" (52°45N 35°30W) during July and January at 0000 and 1200 hr Greenwich time. Lapse rate profiles are based on figures for 10 standard levels (1000, 850, 700, 500, 400, 300, 250, 200, and 150 mb) and humidity profiles on data for the first 5-6 levels. The initial observation data did not permit error analysis. Tables of lapse rate and humidity profiles are presented; examples of correlation matrices, graphs and the correlation factor, and vertical variations in temperature and humidity are quoted for Bismarck. Orig. art. has: 2 figures, 5 tables, and 4 formulas.

SUB CODE: 04, 12 / SUBM DATE: 16Jun64 / ORIG REF: 003 / OTH REF: 002

Card 1/1 LC

UDC: 551.524.1: 551.571.1

POPOV, S.M., insh.

Analysis of methods for calculating the distortion of the front of an impulse wave subject to corona action. Trudy VNIIE no.21: 70-81 '64. (MIRA 19:2)

POPOV, S.M. [deceased]

Some statistical characteristics of the vertical structure of the temperature and humidity fields. Izv. AN SSSR. Fiz. atm. i okeana 1 no.1:18-26 Ja '65. (MIRA 18:5)

1. Institut fiziki atmosfery AN SSSR.

MURAVLEVA, N.V., kand.tekhn.nauk; POPOV, S.M., inzh.

Measurement of the grounding resistance of power line poles without disconnecting the guard wire. Elek.sta. 33 no.11:68-72 N '62. (MIRA 15:12)

(Electric lines--Overhead)

NATAPOV, B.S.; BARZIY, V.K.; OL'SHANETSKIY, V.Ye.; Prinimali uchastiye: FILONOV, V.A., inzh.; YUDIN, M.I., inzh.; IOFFE, M.M., inzh.; POPOV, S.M., inzh.; RYBALKO, G.I., inzh.; ODINETS, L.I., inzh.; SIGALKO, F.V., inzh.; TSIVIRKO, D.Ye.; VOLOSHCHUK, M.D., inzh.

Heat treatment of cold-rolled sheet metal. Stal' 22 no.2:163-165 F '62. (MIRA 15:2)

1. Zaporozhskiy mashinostroitel'nyy institut i zavod "Zaporozhstal'". 2. Zavod "Zaporozhstal" (for Filonov, Yudin, Ioffe, Popov, Rybalko, Odinets). 3. Zaporozhskiy mashinostroitel'nyy institut (for Sigalko, TSivirko, Voloshchuk).
(Sheet steel—Heat treatment)

ARKHIPOV, Nikolay Nikolayevich; KARPACHEV, Pavel Spiridonovich: MAYZEL', Maks Mikhaylovich, doktor tekhn. nauk, prof.; PLEVAKO, Nikolay Alekseyevich; ZAYONCHKOVSKIY, A.D., doktor tekhn. nauk, prof., retsenzent; ZOLOTOV, V.I., inzh., retsenzent; ZYBIN, V.P., doktor tekhn. nauk, retsenzent; KAPUSTIN, I.I., doktor tekhn. nauk, prof., retsenzent; KOZLOV, B.A., inzh., retsenzent; POPOV, S.M., doktor tekhn. nauk, prof., retsenzent; EPPEL', S.S., kand. tekhn.nauk, dots., retsenzent; MINAYEVA, T.N., red.; SHVETSOV, S.V., tekhn. red.

[Basic processes, machinery, and apparatus of light industry] Osnovnye protsessy, mashiny i aparaty legkoi promyshlennosti. [By] N.N.Arkhipov i dr. Moskva, Izd-vo nauchno-tekhn. lit-ry RSFSR, 1961. 491 p. (MIRA 15:2)
(Industry)

POPOV, S.M.; RYAZANOV, S.A.

Significance of the effective radiation in the heat balance of of the ocean. Izv. AN SSSR. Ser. geofiz. no. 2:281-293 F '61. (MIRA 14:2)

(Ocean temperature)

POPOV, S.M. (Frunze)

Approximate solution of problems in pressing shaped plates by the compression of a heated plastic mass. Inzh.sbor. 29:37-54 '60. (MIRA 13:10)

(Plasticity) (Soil mechanics)

Popov, S.M.

PHASE I BOOK EXPLOITATION SOV/4531

Akademiya nauk SSSR. Institut mekhaniki

Inzhenernyy sbornik, tom 26 (Engineering Symposium, Vol. 26) Moscow, 1958. 286 p. 2,400 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye tekhnicheskikh nauk. Institut mekhaniki.

Resp. Ed.: A. A. Il'yushin; Ed.: G. I. Pshenichnov; Tech. Ed.: B. M. Lerman.

PURPOSE: This book is intended for engineers.

COVERAGE: The book contains 29 articles dealing with professional work performed by mechanical engineers, such as the calculations of shells, rods, and plates, and solutions of problems in stress distribution and equilibrium. Oscillations (including flutter) and deformation of shells, equilibrium of shell panels, rods and solids, stability of rods, plates, frames and other members, stress concentration, and bending are discussed. Oscillations of aircraft wings are studied. References accompany each article.

Card 4/6

POPOV, S.M.

Effect of the shape of the shore line on the dynamic regimen of winds. Izv.AN SSSR.Ser.geofiz. no.7:1072-1076 Jl '60. (MIRA 13:7)

(Shore lines) (Winds)

82702

S/049/60/000/004/006/018
E073/E535

3.5000

AUTHORS: Vasil'yev, Yu.F. and Popov, S.M.

TITLE: Temperature Field in the Neighbourhood of Sharp Contoured Headlands (Based on Model Tests)

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geofizicheskaya, 1960, No.4, pp.557-565

TEXT: It has been known for a long time that storms intensify when they hit peninsulas or even individual headlands which project into the sea. Even relatively small headlands have this property. The role of sharp contoured configurations of a coastline have been elucidated by V. V. Shuleykin (Ref.1), who showed that, particularly in the case of winter temperature contrasts between the conditions of the atmosphere above the sea and above the mainland (or over a large island), the coastline is almost accurately contoured by the isotherm passing along it, even if the contour if very complicated. This results in strongly nonuniform temperature and pressure fields, formation of increased temperature and pressure gradients against the headlands and reduced gradients in the region of the curved coastline. A more accurate theoretical

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82702
S/049/60/000/004/006/018
E073/E535

Temperature Field in the Neighbourhood of Sharp Contoured Headlands (Based on Model Tests)

solution of this problem was published by Sekerzh-Zen'kovich (Ref.2); his work confirmed the correctness of the basic assumptions of the author of this paper and enabled calculation of the slight correction factors in particular cases of temperature-baric fields. Analytical solutions are inapplicable to complicated contours, whilst electrical analogues do not allow taking into consideration additional terms of the field equation, which in accordance with the theory is applicable to elliptically and parabolically curved coastlines. It is, therefore, convenient to investigate the temperature field against sharp headlands by means of thermal analogues. Approximate analogues proved useful for the analysis of the phenomena which form the field: a) the active layer is considered as a film which is heated by the surface of the sea; b) this film conducts heat in all horizontal directions and is isotropic in this direction; c) the film will radiate into the neighbouring space the more heat the larger the difference between its temperature and the temperature which would exist in absence of

Card 2/5

82702
S/049/60/000/004/006/018
E073/E535

Temperature Field in the Neighbourhood of Sharp Contoured Headlands (Based on Model Tests)

heating by the sea. The calculations, carried out by V.V.Shuleykin ten years ago, have now been confirmed on the distribution of the average monthly air temperatures along a meridian, which would occur in absence of the influence of oceans. For conditions pertaining in the Central Antarctic, he obtained an average monthly temperature during the coldest winter months of -77°C and this corresponds with direct measurements carried out recently in the Antarctic. In this article experiments are described which were carried out by the authors on the propagation and loss of heat by means of proved test-rigs. The thermal analogues were realised by means of three heating systems which can also be used with advantage in other work. The experiments were carried out with a model of the Black Sea of the scale 1: 3×10^6. As a heat conducting and heat radiating film, an 0.5 mm thick copper sheet was used. Simple calculations showed that this satisfied approximately the requirements of analogy with the natural conditions. Inside the configuration of the "Sea" the heating of the sheet was effected as a result of chemical reactions. Fig.1 shows a sketch

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Temperature Field in the Neighbourhood of Sharp Contoured Headlands (Based on Model Tests)

of the layout of the equipment for simulating the temperature field in the neighbourhood of sharp headlands of the Black Sea. The sketch, Fig.2, shows the measured results of the temperature fields obtained in the analogue of the Black Sea. It can be seen that the isolines become much denser against sharp contoured headlands and that there is an appreciable stretching of the isolines in the neighbourhood of concave sections of the coastlines, fully in correspondence with the theory of V. V. Shuleykin. Experiments were also carried out on models of the Mediterranean. Fig.3 shows a sketch of the equipment used for simulating the temperature fields against sharp protrusions into the Mediterranean. Fig.5 shows the results of measurements of the temperature field in the Mediterranean obtained in model tests and it is stated that these are in satisfactory agreement with naturally measured results. The number of winter storms with intensities exceeding 8 balls are nineteen times more frequent in the region of Sicily than in any other spot of the Mediterranean. This is easily explained on the

Card 4/5

Temperature Field in the Neighbourhood of Sharp Contoured Headlands (Based on Model Tests)

basis of the theory of monsoon circulations. The authors also made comparative measurements of the temperatures along the coastline (Fig.6). Data obtained by Shuleykin in the Aegean Sea during his expedition on the "Sedov" in December, 1957 showed that the theoretically derived formula on the relation between pressure and temperature:

$$d\tau = -\frac{1}{\Pi} dp, \qquad (10)$$

where $\Pi = 1.6$ for the pressure expressed in millibars, is in good agreement with measured results. The obtained results lead to the conclusion that in the neighbourhood of peninsulas and headlands jutting into the sea there is a sharp increase in the monsoon fields on both sides leading to an increase in the temperature and thus in the baric gradients and an intensification of the winds caused by these gradients, which in turn leads to an intensification of the storms. There are 7 figures and 5 Soviet references.

SUBMITTED: April 3, 1959

Card 5/5

POPOV, S.M. (Moskva)

Stability of circular plates beyond the elastic limit.
Inzh.sbor. 27:92-100 '60. (MIRA 13:6)
(Elastic plates and shells)

S/124/60/000/006/032/039
A005/A001

Translation from: Referativnyy zhurnal, Mekhanika, 1960, No. 6, pp. 153-154, # 7869

AUTHOR: Popov, S.M.

TITLE: The Stability of Rods and Plates Beyond the Elasticity Limit

PERIODICAL: Inzhenernyy sb., 1958, Vol. 26, pp. 161-178

TEXT: Some formulae are proposed for determining the critical loads beyond the elasticity limit for rectangular plates with various conditions of clamping the plate edges. In the special case, when the unloaded edges of the plate are free, formulae are obtained for rods with deformed cross section. It is supposed that the subcritical (free from moments) stress state is uniform: uniform compression is parallel to the one (arbitrary) of the edges, plain shear, and various combinations of these stress states. The calculation formulae were obtained on the basis of the strain theory in two variants, which differ from each other owing to considering or neglecting the unloading effect. The majority of results were obtained by the energy method; in individual cases, the integration of the differential equation of equilibrium was applied. The final

Card 1/2

POPOV, S. N.
USSR/RR Transport
Bibliog

4602.0105

May 1947

"Book Shelf" 1 p

"Zh-d Transport" No 5

Summary of following books published by Transzheleziadat in 1946 and 1947 including number of pages and price of each publication: "Organization of Freight Work in Railroad Transport. Stocks and Mechanization of Loading and Unloading Operations," G. P. Grinevich, "Analysis of the Balance of Railroads," A. N. Grigor'yev; "Mechanization of Loading and Unloading Operations at Freight Stations"; "Leading Methods of Work at Railroad Fuel Warehouses," T. A. Bugayets and G. V. Dubinin; and "Superfluous Material at Railroad Stations," S. N. Popov.

18G74

POPOV,S.N., kandidat tekhnicheskikh nauk

Improving the routine maintenance of ballast sections. Tekh.zhel. dor.7 no.8:14-16 Ag'48. (MLRA 8:11)
(Railroads--Track)

POPOV, S. N.

Popov, S. N. - "The immediate tasks of regular readbed maintenance", Tekhnika zhel. dorog, 1948, No. 12, p. 1-3.

So: U-3042, 11 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 7, 1949).

POPOV,S.N., kandidat tekhnicheskikh nauk

Allowable stresses on ballast. Trudy TSNII MPS no.97:353-385 '55.
(Ballast) (MLRA 8:12)

SOV/124-57-9-10915

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 9, p 154 (USSR)

AUTHOR: Popov, S. N.

TITLE: On the Allowable Ballast Stresses (O dopuskayemykh napryazheniyakh na ballast)

PERIODICAL: Tr. Vses. n.-i. in-ta zh.-d. transp., 1955, Nr 97, pp 353-385

ABSTRACT: Bibliographic entry

Card 1/1

POPOV, S.N., kand.tekhn.nauk

More attention to track ballast. Put' i put.khoz. no.7:14-15 Jl '59. (MIRA 12:10)
(Stone, Crushed)

SHAKHUNYANTS, Georgiy Mikhaylovich, doktor tekhn. nauk; AMELIN, S.V., prof., retsenzent; KONSTANTINOV, V.N., dots., retsenzent; SMIRNOV, M.P., retsenzent; YAKOVLEV, V.F., retsenzent; BOCHENKOV, M.S., kand.tekhn. nauk, retsenzent; BROMBERG, Ye.M., retsenzent; YERSHKOV, O.P., retsenzent; ZVEREV, B.N., retsenzent; ZOLOTARSKIY, A.F., retsenzent; IVASHCHENKO, G.I., retsenzent; LINEV, S.A., retsenzent; MARKAR'YAN, M.A., retsenzent; POPOV, V.V., retsenzent; POPOV, S.N., retsenzent; SEREBRENNIKOV, V.V. retsenzent; SHAFRANOVSKIY, A.K., retsenzent; NOVITSKIY, G.I., inzh., retsenzent; VIKTOROV, I.I., kand.tekhn.nauk, retsenzent; VYSOTSKIY, A.F., kand.tekhn.nauk, retsenzent; SAATCHYAN, G.G., kand.tekhn.nauk, retsenzent; YAKOVLEVA, Ye.A., kand.tekhn.nauk, retsenzent; TITOV, V.P., kand.tekhn.nauk, retsenzent; GRUSHEVOY, N.G., inzh., red.; BROMBERG, Ye.M., kand.tekhn.nauk, red.; KHITROV, P.A., tekhn. red.

[Railroad tracks] Zheleznodorozhnyi put'. Moskva, Vses.izdatel'sko-poligr.ob"edinenie M-va putei soobshcheniia, 1961. 615 p. (MIRA 14:12)

1. Kafedra "Zheleznodorozhnyy put'" Leningradskogo instituta inzhenerov zheleznodorozhnogo transporta (for Amelin, Konstantinov, Smirnov, Yakovlev). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut zheleznodorozhnogo transporta (for Bochenkov, Bromberg, Yershkov, Zverev, Zolotarskiy, Ivashchenko, Linev, Markar'yan, Popov, V.V., Popov, S.N., Serebrennikov, Shafranovskiy, Novitskiy). 3. Vsesoyuznyy nauchno-issledovatel'skiy institut transportnogo stroitel'stva (for Viktorov, Vysotskiy, Saatchyan, Yakovleva, Titov)

(Railroads—Track) (Railroad engineering)

POPOV, S.N., kand.tekhn.nauk

Need for an improvement of the ballast layer section. Put' i put. khoz. 6 no.5:26-31 '62. (MIRA 15:4)
(Ballast (Railroads))

POPOV, S.N. Kand. med. nauk zasluzhennyy vrach RSFSR

On transformation of bone structure related to functional stress. Vest. rent. i rad. 38 no.6:15-17 N-D '63. (MIRA 17:6)

1. Iz rentgeno-radiologicheskogo otdeleniya (zav.- S.N. Popov) Tambovskoy oblastnoy bol'nitsy.

BEGIDZHANOVA, A.P., kand. tekhn. nauk; KHARACH, G.M., inzh.;
POPOV, S.N., inzh.

Investigating asbestos friction disks in tractor units.
Trakt. i sel'khozmash. 33 no.10:12-14 O '63.
(MIRA 17:1)

1. Gosudarstvennyy soyuznyy nauchno-issledovatel'skiy traktornyy institut (for Begidzhanova). 2. Institut mashinovedeniya AN SSSR (for Kharach). 3. Gosudarstvennyy vsesoyuznyy nauchno-issledovatel'skiy tekhnologicheskiy institut remonta i ekspluatatsii mashinno-traktornogo parka (for Popov).

POPOV, S.N.; GOLOVANCHIKOV, A.M.; GONCHAROV, G.I.; LYSENKO, T.P.; ORLOVA, I.A., inzh., red.; VOROB'YEVA, L.V., tekhn.red.

[New transverse profiles of the ballast section] Novye poperechnye profili ballastnoi prizmy. Moskva, Transzheldorizdat, 1963. 31 p. (MIRA 17:1)

BEGIDZHANOVA, A.P., kand.tekhn.nauk; KHARACH, G.M., inzh.; POPOV, S.N., inzh.

Results of testing friction members of tractors on the TIS-1 stand. Trakt. i sel'khozmash. 33 no.1:7-11 Ja '63. (MIRA 16:3)

1. Gosudarstvennyy soyuznyy nauchno-issledovatel'skiy traktornyy institut (for Begidzhanova). 2. Institut mashinovedeniya AN SSSR (for Kharach). 3. Gosudarstvennyy vsesoyuznyy nauchno-issledovatel'skiy tekhnologicheskiy institut remonta i ekspluatatsii mashinno-traktornogo parka (for Popov).
(Friction) (Tractors—Testing)

AFANAS'YEV, Yuriy Vyacheslavovich, dots.; DERZHAVETS, Abram Yakovlevich, inzh.; YEGOROV, Nikolay Vladimirovich, dots.; POPOV, Sergey Nikolayevich, prof.; SPITKOVSKIY, Matvey Isarovich; NUMUPAROV, S.M., red.; LAPINA, Z.D., red. izd-va; LAVRENOVA, N.B., tekhn. red.

[Synthetic materials in shipbuilding and ship repairs] Sinteticheskie materialy v sudostroenii i sudoremonte. [by] IU.V.Afanas'ev i dr. Moskva, Izd-vo "Morskoi transport," 1962. 167 p. (MIRA 15:5)

(Polymers) (Shipbuilding)
(Ships--Maintenance and repair)

POPOV, Slavcho Nikolov, inzh.

Prefabricated ferroconcrete anchors. Khidrotekh i melior 9 no.8:238-240 '64.

POPOV, Slavcho N., inzh.

Influence of the cement mortar on the carrying capacity of perforating anchors. Stroitelstvo 11 no.6:23-27 N-D '64.

POPOV, S.N., kand.tekhn.nauk

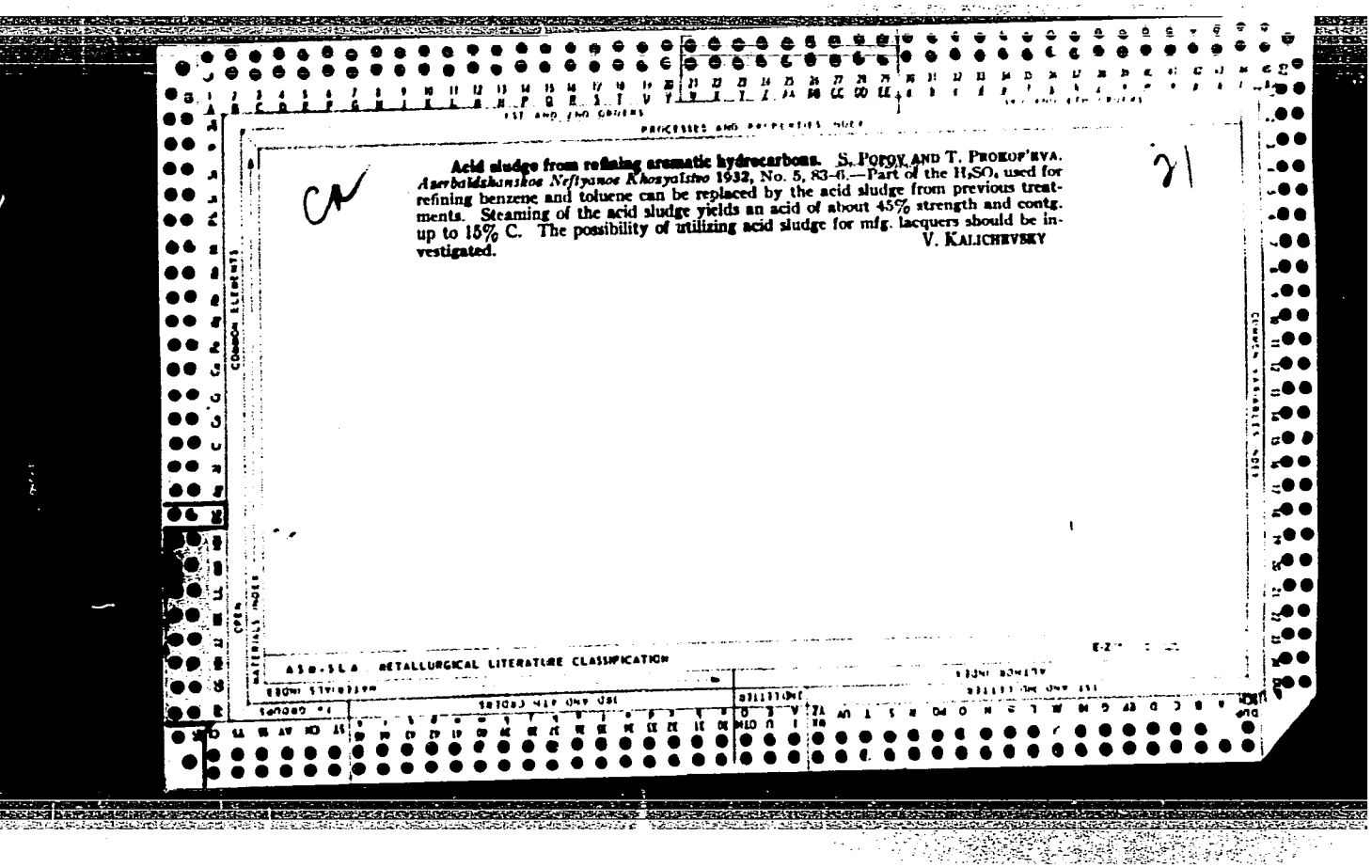
New method of determining the strength of crushed rock from an original sample. Vest.TSNII MPS 18 no.6:35-39 S '59. (MIRA 13:2)

(Stone, Crushed--Testing)

BEGIDZHANOVA, A.P.; POPOV, S.N.; KHARACH, G.M.

Testing friction materials for the friction areas of tractors. Trakt. i sel'khozmash. 31 no.8:15-17 Ag '61. (MIRA 14:7)

1. Nauchno-issledovatel'skiy avtotraktornyy institut (for Begidzhanova). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut mekhanizatsii sel'skogo khozyaystva (for Popov). 3. Institut mashinovedeniya AN SSSR (for Kharach).
(Tractors) (Friction)



Acid sludge from refining aromatic hydrocarbons. S. POPOV AND T. PROKOP'EVA. *Azerbaidzhanskoe Neftyanoe Khozyaistvo* 1932, No. 5, 83-6.—Part of the H_2SO_4 used for refining benzene and toluene can be replaced by the acid sludge from previous treatments. Steaming of the acid sludge yields an acid of about 45% strength and contg. up to 18% C. The possibility of utilizing acid sludge for mfg. lacquers should be investigated.
V. KALICHEVSKY

PROCESSES AND PROPERTIES INDEX

Cracking of petroleum. III. S. Popov. *Neft* 4, No. 18, 12-13(1933).
A. A. Boehtlingk

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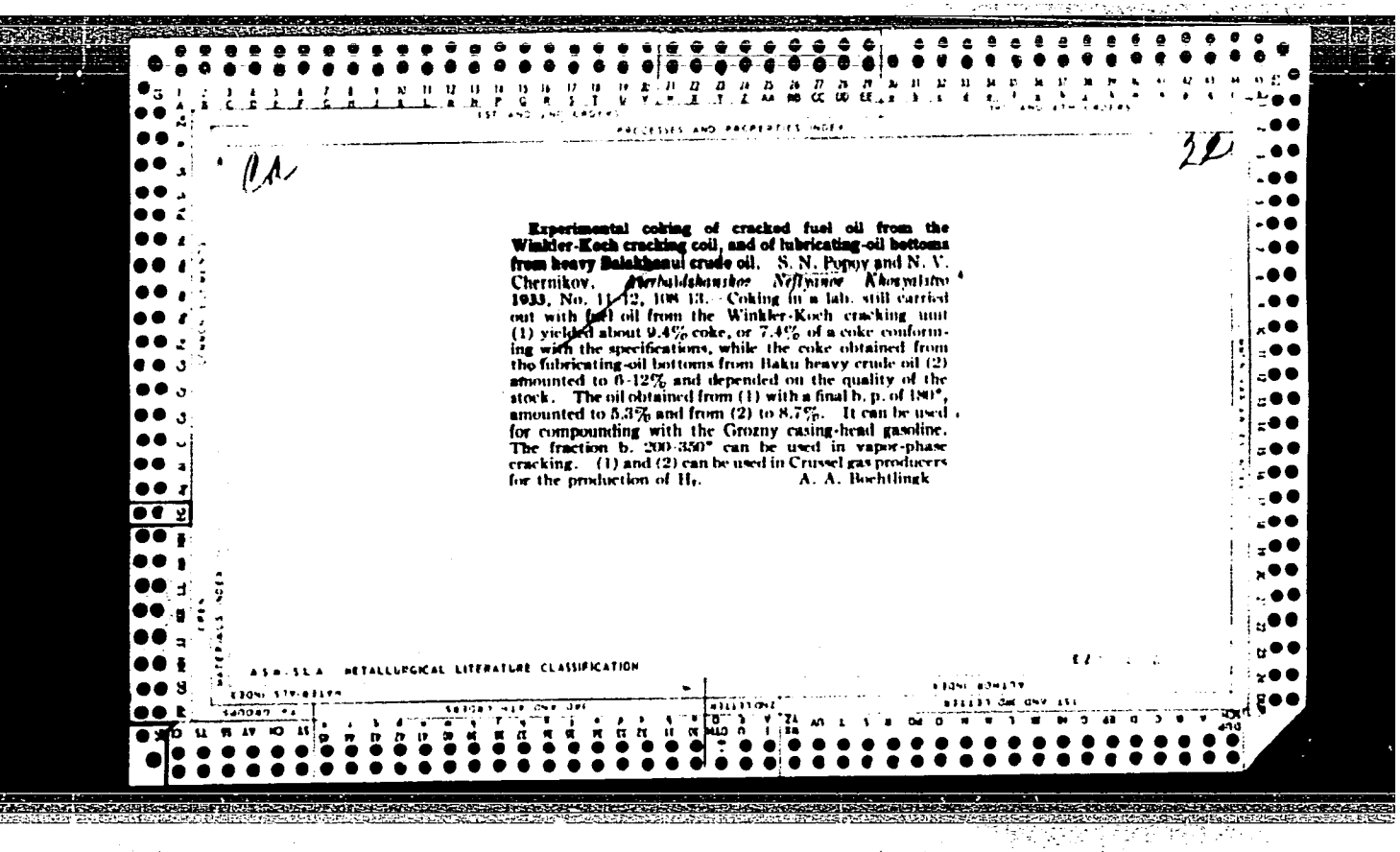
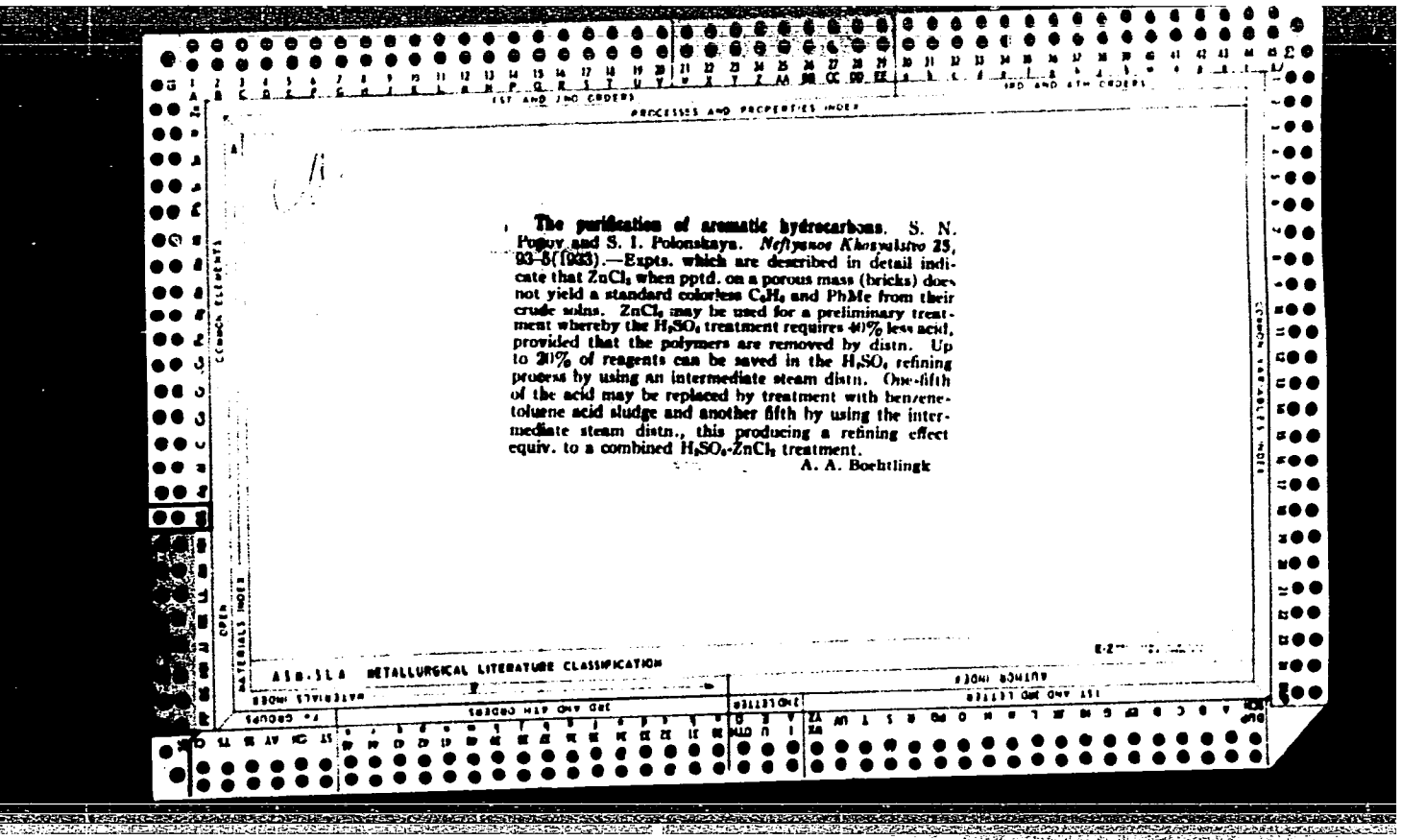
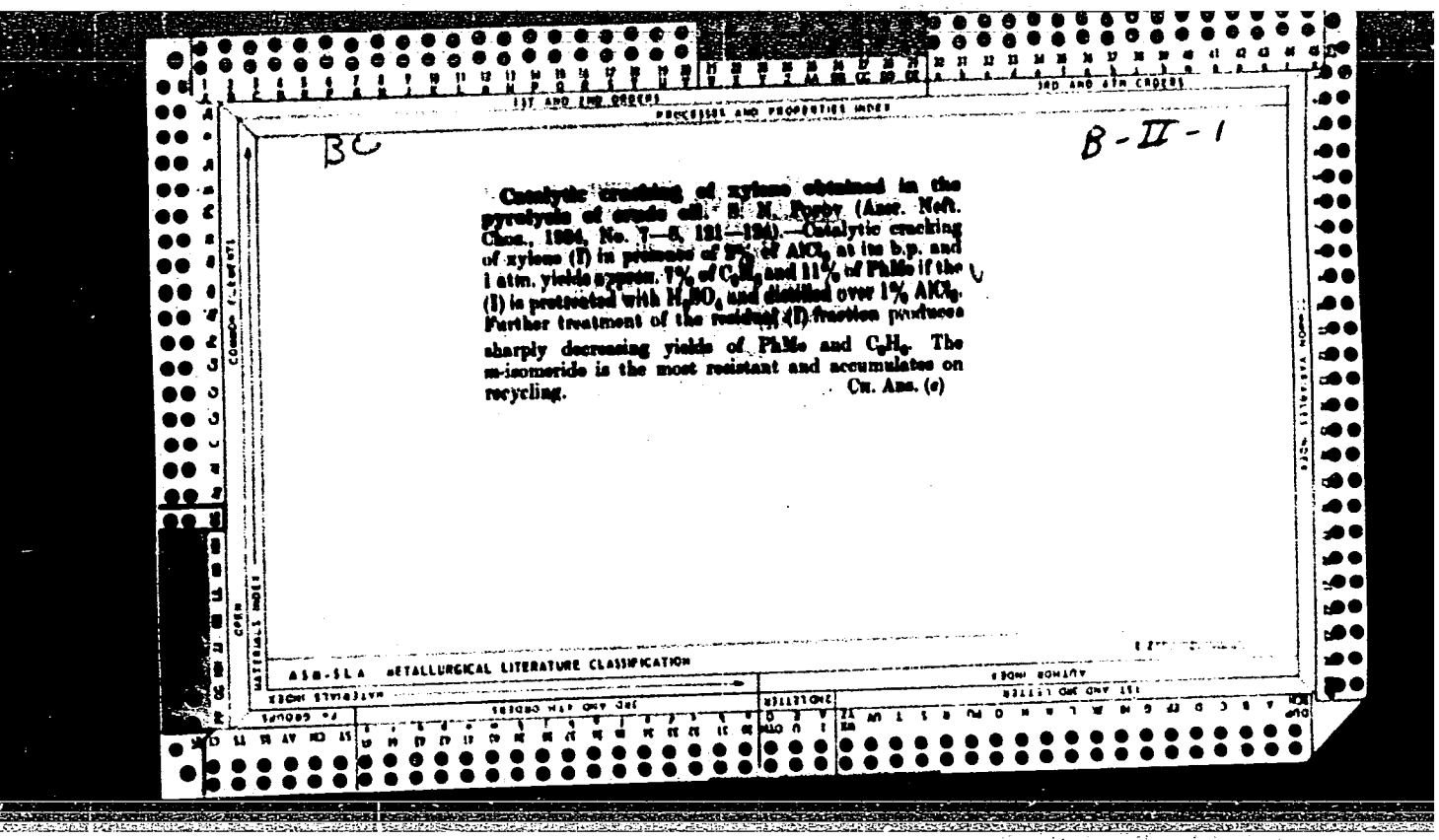


Experimental coking of cracked fuel oil from the Winkler-Koch cracking coil, and of lubricating-oil bottoms from heavy Balakhanui crude oil. S. N. Popov and N. V. Chernikov. *Azerbaidzhanskoe Neftyanoe Khozyaistvo* 1933, No. 11-12, 108-13. Coking in a lab. still carried out with fuel oil from the Winkler-Koch cracking unit (1) yielded about 9.4% coke, or 7.4% of a coke conforming with the specifications, while the coke obtained from the lubricating-oil bottoms from Baku heavy crude oil (2) amounted to 6-12% and depended on the quality of the stock. The oil obtained from (1) with a final b. p. of 180°, amounted to 5.3% and from (2) to 8.7%. It can be used for compounding with the Grozny casing-head gasoline. The fraction b. 200-350° can be used in vapor-phase cracking. (1) and (2) can be used in Crussel gas producers for the production of H_2. A. A. Boehtlingk



The purification of aromatic hydrocarbons. S. N. Poguv and S. I. Polonskaya. *Neftyanoe Khozyaistvo* **25**, 93–8(1933).—Expts. which are described in detail indicate that $ZnCl_2$ when pptd. on a porous mass (bricks) does not yield a standard colorless C_6H_6 and PhMe from their crude solns. $ZnCl_2$ may be used for a preliminary treatment whereby the H_2SO_4 treatment requires 40% less acid, provided that the polymers are removed by distn. Up to 20% of reagents can be saved in the H_2SO_4 refining process by using an intermediate steam distn. One-fifth of the acid may be replaced by treatment with benzene-toluene acid sludge and another fifth by using the intermediate steam distn., this producing a refining effect equiv. to a combined H_2SO_4-$ZnCl_2$ treatment.

A. A. Boehtlingk



BC

B-II-1

Catalytic cracking of xylene obtained in the pyrolysis of crude oil. E. N. Popov (Azer. Neft. Chem., 1934, No. 7—8, 121—124).—Catalytic cracking of xylene (I) in presence of 5% of $AlCl_3$ at its b.p. and 1 atm. yields appreciable % of C_6H_6 and 11% of PhMe if the (I) is pretreated with H_2SO_4 and distilled over 1% $AlCl_3$. Further treatment of the residual (I) fraction produces sharply decreasing yields of PhMe and C_6H_6. The m-isomeride is the most resistant and accumulates on recycling. Cu. Abs. (e)

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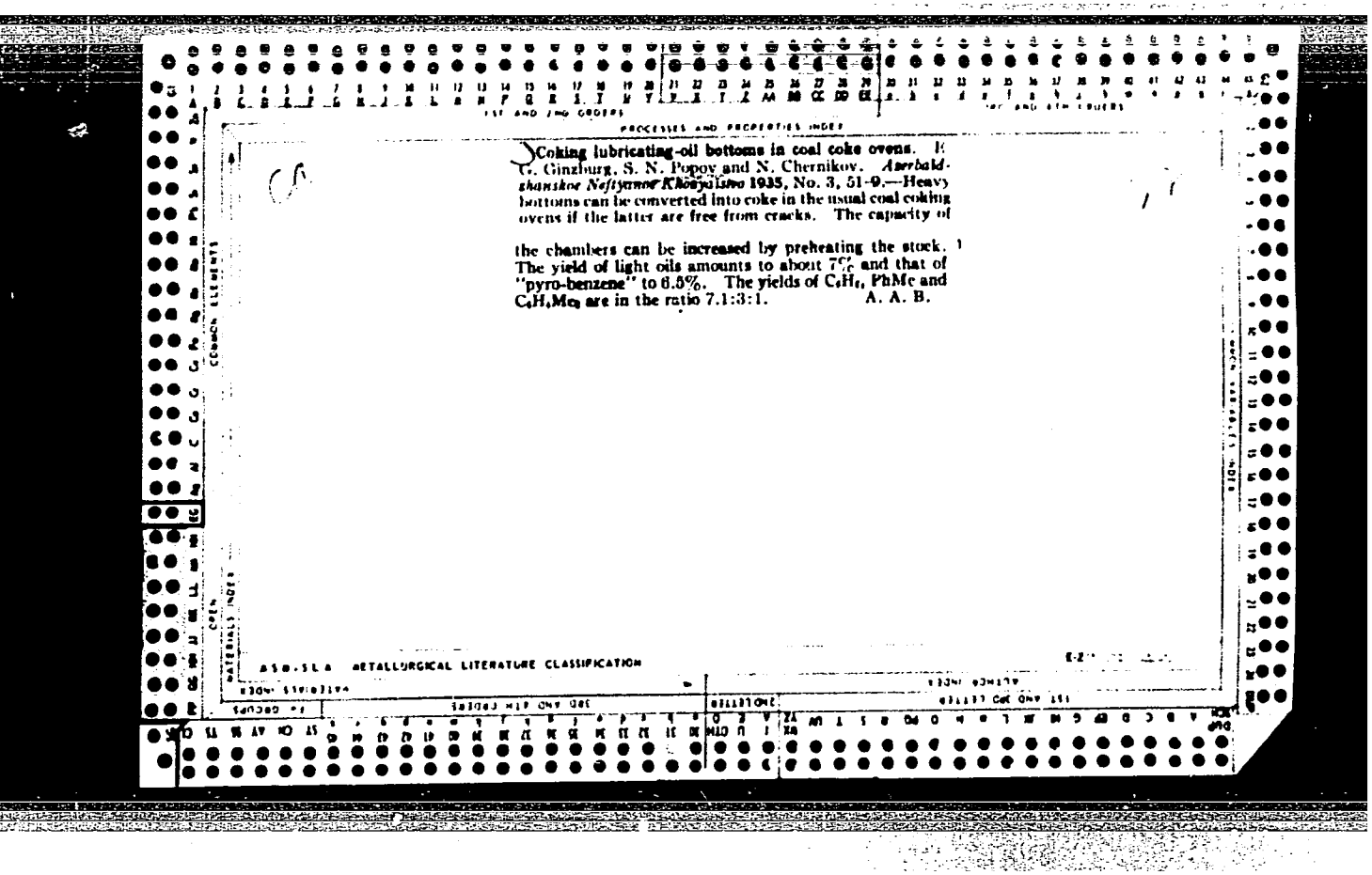

PROCESSES AND PROPERTIES INDEX

Coking lubricating-oil bottoms in coal coke ovens. I
G. Ginzburg, S. N. Popov and N. Chernikov. *Azerbaidzhanskoe Neftyanoe Khozyaistvo* 1935, No. 3, 51-9.—Heavy bottoms can be converted into coke in the usual coal coking ovens if the latter are free from cracks. The capacity of the chambers can be increased by preheating the stock. The yield of light oils amounts to about 7% and that of "pyro-benzene" to 6.5%. The yields of C_6H_6, $PhMe$ and $C_6H_4Me_2$ are in the ratio 7.1:3:1. A. A. B.

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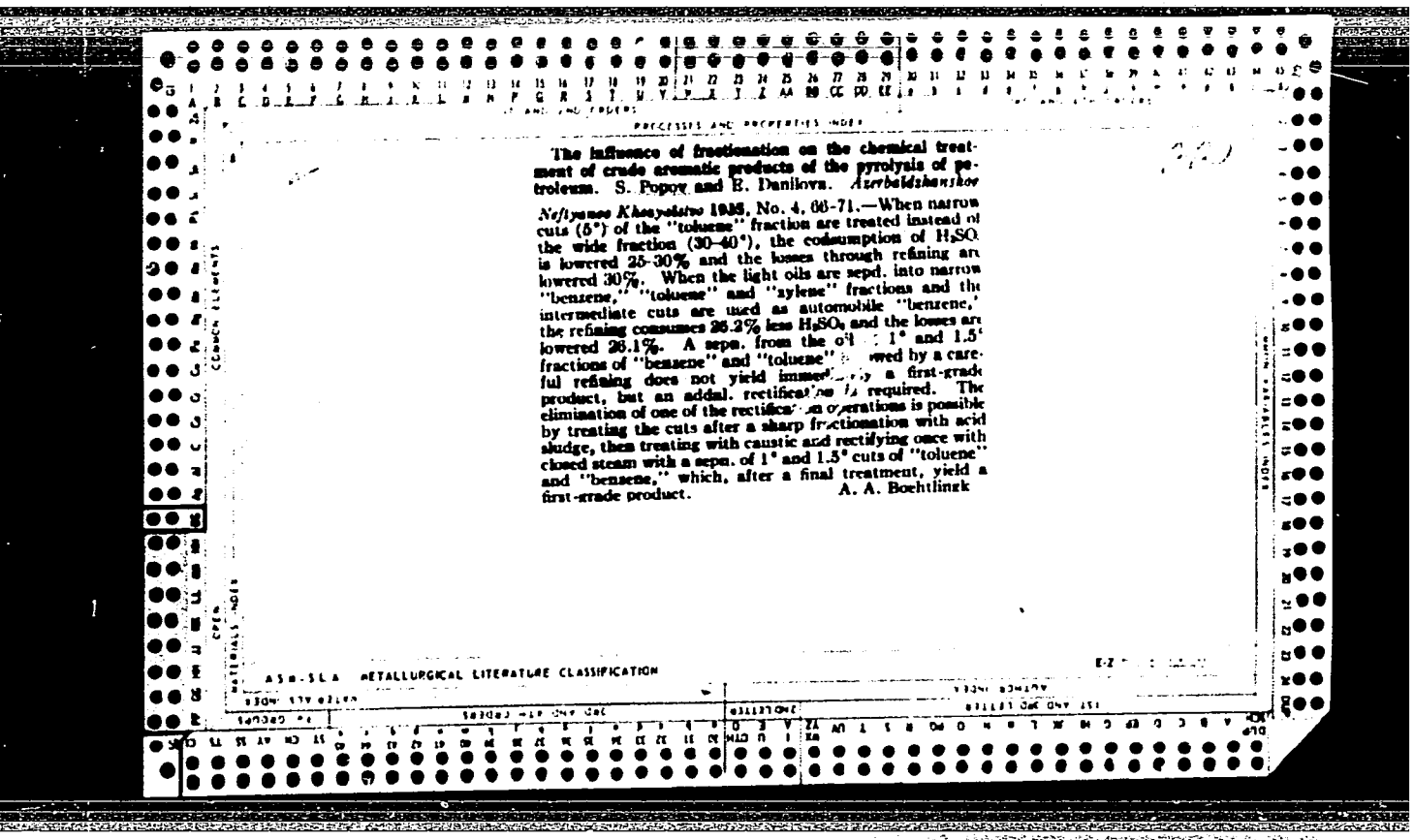

PROCESSES AND PROPERTIES INDEX

The influence of fractionation on the chemical treatment of crude aromatic products of the pyrolysis of petroleum. S. Popov and E. Danilova. *Azerbaidzhanskoe Neftyanoe Khozyaistvo* 1935, No. 4, 66-71.—When narrow cuts (5°) of the "toluene" fraction are treated instead of the wide fraction (30–40°), the consumption of H_2SO_4 is lowered 25-30% and the losses through refining are lowered 30%. When the light oils are sepd. into narrow "benzene," "toluene" and "xylene" fractions and the intermediate cuts are used as automobile "benzene," the refining consumes 26.2% less H_2SO_4 and the losses are lowered 26.1%. A sepn. from the oil [illegible] 1° and 1.5° fractions of "benzene" and "toluene" [illegible]owed by a careful refining does not yield immed[illegible] a first-grade product, but an addnl. rectificat[illegible] is required. The elimination of one of the rectifica[illegible]n operations is possible by treating the cuts after a sharp fractionation with acid sludge, then treating with caustic and rectifying once with closed steam with a sepn. of 1° and 1.5° cuts of "toluene" and "benzene," which, after a final treatment, yield a first-grade product.

A. A. Boehtlingk

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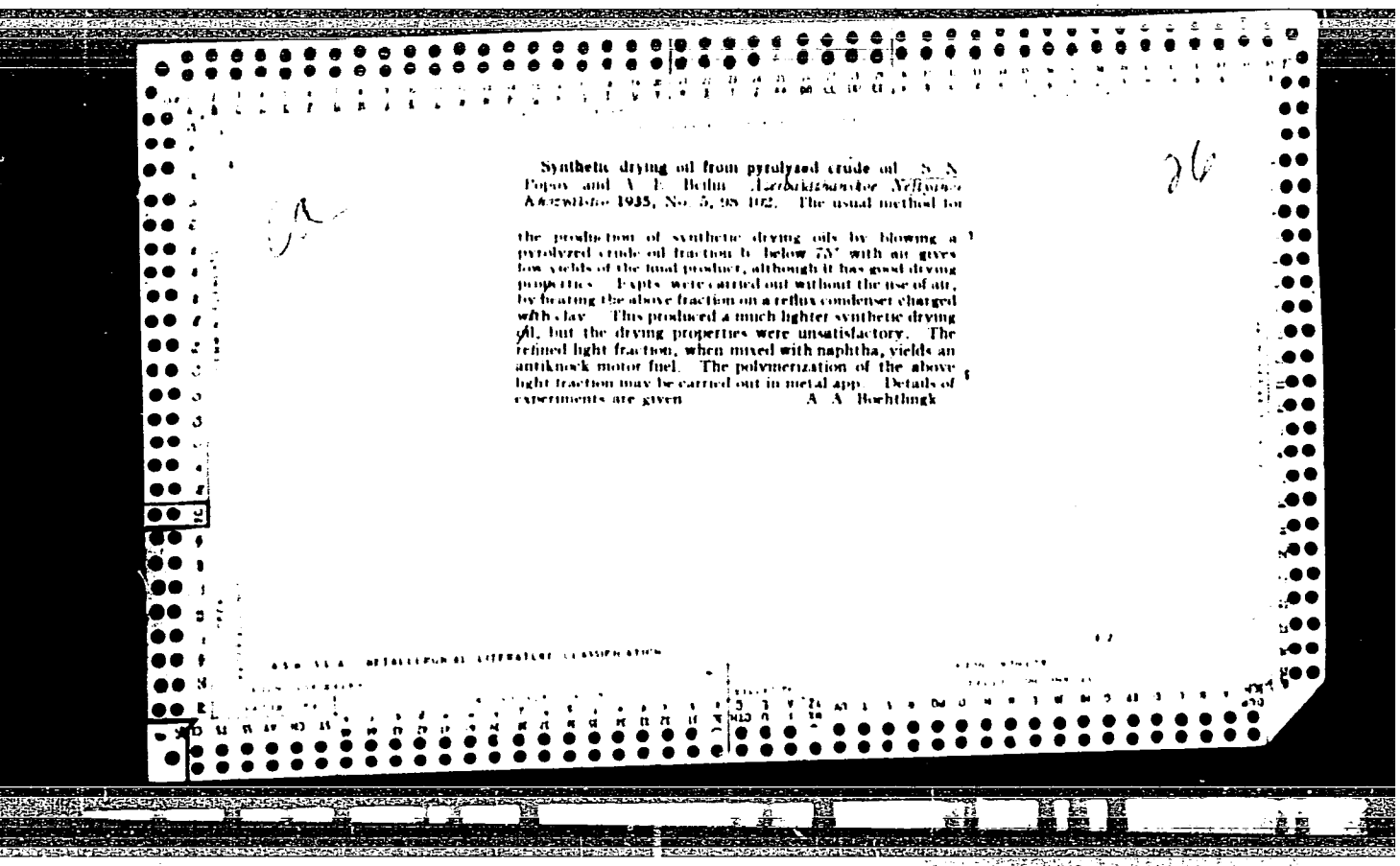
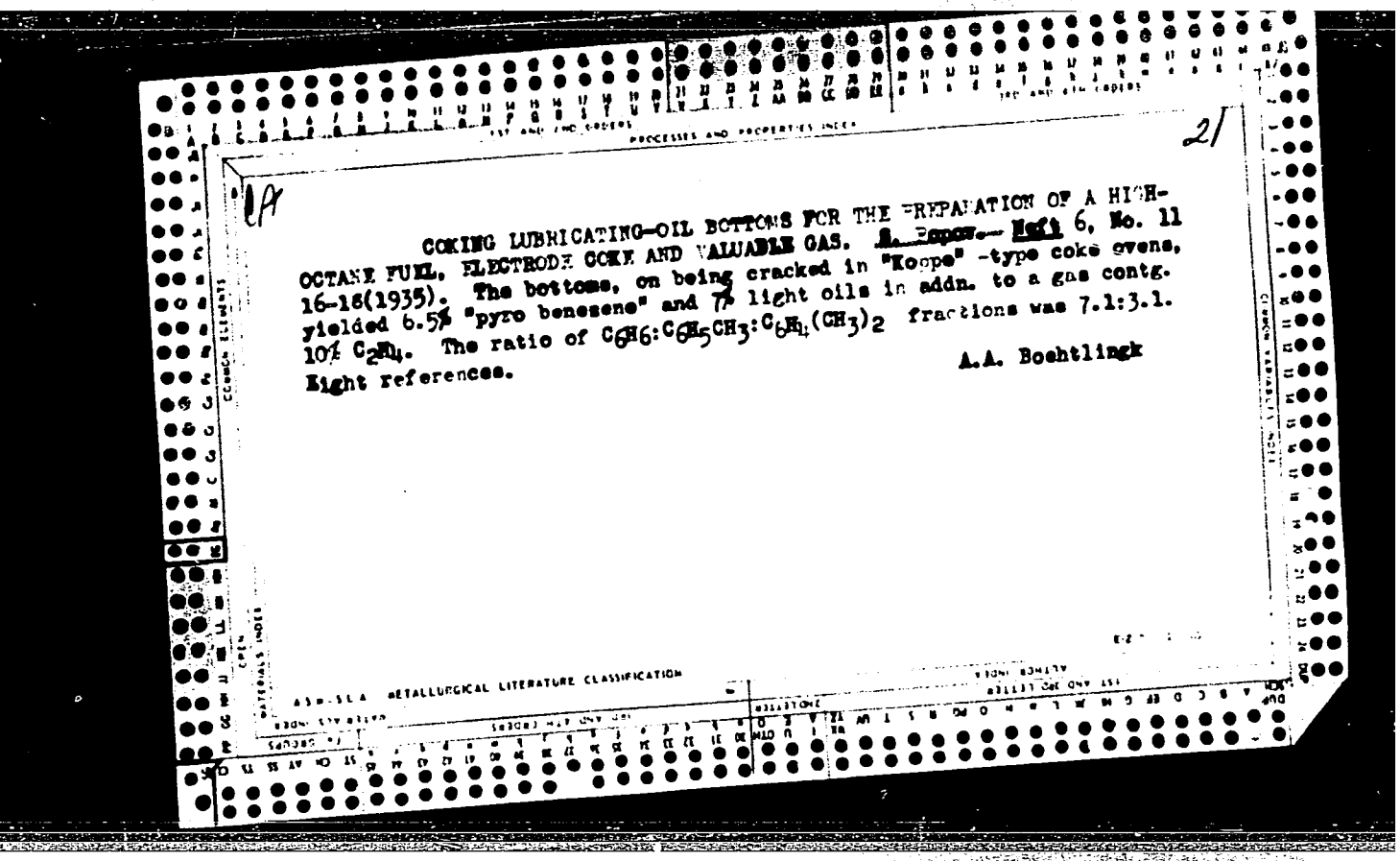


Synthetic drying oil from pyrolyzed crude oil. S. N. Popov and V. F. Beilin. *Azerbaidzhanskoe Neftyanoe Khozyaistvo* 1935, No. 5, 98-102. The usual method for the production of synthetic drying oils by blowing a pyrolyzed crude oil fraction b. below 75° with air gives low yields of the final product, although it has good drying properties. Expts. were carried out without the use of air, by heating the above fraction on a reflux condenser charged with clay. This produced a much lighter synthetic drying oil, but the drying properties were unsatisfactory. The refined light fraction, when mixed with naphtha, yields an antiknock motor fuel. The polymerization of the above light fraction may be carried out in metal app. Details of experiments are given. A. A. Boehthingk



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1A

COKING LUBRICATING-OIL BOTTOMS FOR THE PREPARATION OF A HIGH-OCTANE FUEL, ELECTRODE COKE AND VALUABLE GAS. [illegible] Petrol. 6, No. 11 16-18(1935). The bottoms, on being cracked in "Koppe" -type coke ovens, yielded 6.5% "pyro benezene" and 7% light oils in addn. to a gas contg. 10% C_2H_4. The ratio of C_6H_6:$C_6H_5CH_3$:$C_6H_4(CH_3)_2$ fractions was 7.1:3.1. Eight references.

A.A. Boehtlingk

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